

National Weather Service Storm Data and Unusual Weather Phenomena



Time Local/ Length Width Persons Damage
Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

WISCONSIN, Southeast

WIZ046>047-051-051-056>060-062>072 Marquette - Green Lake - Fond Du Lac - Sauk - Columbia - Dodge - Washington - Ozaukee - Iowa - Dane - Jefferson - Waukesha - Milwaukee - Lafayette - Green - Rock - Walworth - Racine - Kenosha

01 0000CST 0 0 Drought 30 2359CST

Drought conditions, which started in August, 2003, continued through the month of November, 2003, across south-central and southeast Wisconsin. At the start of the month, the entire area was in a moderate (D1) to severe drought (D2), however, widespread moderate to heavy rains during the period of November 1-4, resulted in an improvement to an abnormally dry (D0) to moderate (D1) drought status. The D0 area at the end of November, 2003, stretched from Lafayette and Green County through Dane to Marquette and Green Lake County. The remainder of south-central and southeast Wisconsin was in moderate (D1) drought status at the end of the month. Monthly rainfall amounts ranged from 3 inches in a small area of northern Milwaukee County to over 8 inches in parts of Lafayette, Iowa, Dane, Coumbia, and Green Lake Counties. The bulk of the monthy rains fell during the first four days of November, 2003.

Columbia County					
Portage	01 04	0000CST 2359CST	0	0	Heavy Rain
Dane County					
Madison	01 04	0000CST 2359CST	0	0	Heavy Rain
Dodge County					
Beaver Dam	01 04	0000CST 2359CST	0	0	Heavy Rain
Fond Du Lac County					
Fond Du Lac	01 04	0000CST 2359CST	0	0	Heavy Rain
Green County					
Monroe	01 04	0000CST 2359CST	0	0	Heavy Rain
Green Lake County					
Green Lake	01 04	0000CST 2359CST	0	0	Heavy Rain
Iowa County					
Dodgeville	$\begin{array}{c} 01 \\ 04 \end{array}$	0000CST 2359CST	0	0	Heavy Rain
Jefferson County					
Ft Atkinson	01 04	0000CST 2359CST	0	0	Heavy Rain
Kenosha County					
Kenosha	01 04	0000CST 2359CST	0	0	Heavy Rain
Lafayette County					
Darlington	01 04	0000CST 2359CST	0	0	Heavy Rain
Marquette County					
Montello	01 04	0000CST 2359CST	0	0	Heavy Rain
Milwaukee County					
Milwaukee	01 04	0000CST 2359CST	0	0	Heavy Rain
Ozaukee County					
Port Washington	01 04	0000CST 2359CST	0	0	Heavy Rain



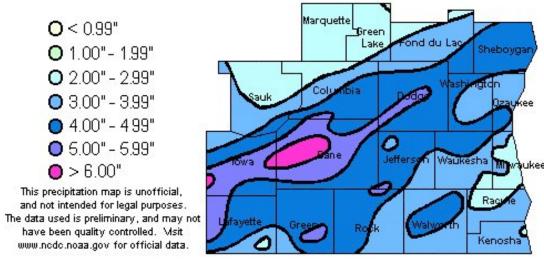
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		Time Local/	Path Length	Path Width	Numb Pers	er of	Estima Dama	ited	November 2003
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm
WISCONSIN, Souther	<u>east</u>								
Racine County									
Racine	01 04	0000CST 2359CST			0	0			Heavy Rain
Rock County									
Janesville	01 04	0000CST 2359CST			0	0			Heavy Rain
Sauk County									
Baraboo	01 04	0000CST 2359CST			0	0			Heavy Rain
Sheboygan County									
Sheboygan	01 04	0000CST 2359CST			0	0			Heavy Rain
Walworth County									
Elkhorn	01 04	0000CST 2359CST			0	0			Heavy Rain
Washington County									
West Bend	01 04	0000CST 2359CST			0	0			Heavy Rain
Waukesha County									
Waukesha	01 04	0000CST 2359CST			0	0			Heavy Rain

Milwaukee/Sullivan CWA Rainfall Event

6 am Nov, 1 through 6 am Nov. 5



Widespread moderate to heavy rains across south-central and southeast Wisconsin during the period of November 1-4, resulted in an improvement to long-term drought conditions. Thunderstorms with locally heavy rain were noted on November 1st, 2nd, and 4th. Training of convective cells occurred on a line from southwestern Iowa County to the Middleton and Madison area in Dane County to the Juneau area in Dodge County. These corridor had rainfall totals of 5 to over 6 inches for the four-day period. Heavy rains during the pre-dawn hours on November 4th combined with leaf-clogged storm sewers to produce minor urban flooding in the cities of Madison, Sheboygan (Sheboygan Co.), and Milwaukee (Milwaukee Co.). These rains were primarily responsible for an improvement of moderate (D1) to severe (D2) drought conditions to abnormally dry (D0) to moderate (D1) conditions by the end of November, 2003. Three consecutive, daily, rainfall records were set at Madison on the 2nd, 3rd, and 4th, where the 4-day total was 5.09 inches. An unofficial 6.8 inches was measured for Nov 1-4, at a location a couple miles west of Middleton. The monthly rainfall at Madison's Truax Field was 7.49 inches, or 5.18 inches above normal. This was the 2nd wettest November on the books. The south-central counties experienced another round of decent rains on November 23rd, with Madison registering 1.70 inches. A monthly total of 8.11 inches was measured in the village of Mazomanie in northwest Dane County. Other scattered locations in Lafayette, Iowa, Dane, Columbia, and Green Lake Counties also had over 8 inches of precipitation for the month. At Milwaukee's Mitchell Field, 3.94 inches of rain fell during the month, or 1.24 inches above normal. Of this total, 3.59 inches fell during the first



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Time Path Path Number of Estimated November 2003
Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

WISCONSIN, Southeast

four days of the month. In response to the rains on the first four days of the month, water levels in lakes, rivers, and streams rose from 25% to 50% of capacity to 75% to 90% of their bank-full levels by the end of the month.

WIZ046>047-051>052-056>060-062>063-065>068-071>072 Marquette - Green Lake - Fond Du Lac - Sheboygan - Sauk - Columbia - Dodge - Washington - Ozaukee - Iowa - Dane - Waukesha - Milwaukee - Lafayette - Green - Racine - Kenosha

12 1200CST 0 0 51.5K Strong Wind (MG39) 2300CST

Strong west to northwest, post-cold-frontal winds occurred over parts of south-central and southeast Wisconsin. Maximum wind gusts were generally in the 39 to 49 kts range (45 to 57 mph). Some large trees or large tree branches toppled onto some power lines, resulting in loss of commercial power for a couple hours. All counties had reports of downed power-lines. The gusts caused a construction crane to be pushed againt the wall of a hospital in Milwaukee (Milwaukee Co.), resulting in window and trim damage. In the city of Waukesha (Waukesha Co.), the gusty winds pushed a tree onto a home, resulting minor roof damage. At least 6200 customers in southeast Wisconsin lost electrical power, but there were no serious fires, injuries, or deaths.

WIZ064-069>070

Jefferson - Rock - Walworth

12 1500CST 0 0 10K High Wind (MG56) 1900CST

Powerful west to northwest, post-cold-frontal winds occurred over parts of south-central and southeast Wisconsin. Maximum wind gusts were 56 kts (65 mph) at Lake Beulah (Walworth Co.), which is near East Troy; 56 kts (64 mph) at a school in Milton (Rock Co.), which is part of Madison TV-15's WEATHERNET; and 53 kts (61 mph) on the southwest side of Watertown (Jefferson Co.). Some large trees or large tree branches were toppled onto some power lines, resulting in loss of commercial power for a couple hours. In Janesville (Rock Co.), a wind-toppled lage tree scraped a lot of paint off a vehicle. At least 6200 customers in southeast Wisconsin lost electrical power, but there were no serious fires, injuries, or deaths.